

REMARKS

This Amendment responds to the Office Action dated June 4, 2003 in which the Examiner objected to the title, rejected claims 1, 5, 6, 10-11 and 15-20 under 35 U.S.C. §102(b) and objected to claims 3, 8 and 13 as being dependent upon a rejected base claim but would be allowable if rewritten in independent form.

Applicant respectfully requests the Examiner acknowledge the priority document filed July 6, 2001.

Applicants respectfully point out to the Examiner the Information Disclosure Statement filed February 21, 2002. It is respectfully requested that the Examiner acknowledge the Information Disclosure Statement.

As indicated above, a new title has been provided which clearly indicates the invention to which the claims are directed. It is respectfully requested that the Examiner approves the new title.

Claims 1, 19 and 20 claim an electronic part transport device comprising a transport medium, a driving means, a supply means, a delivery means and a removal means. Claim 20 additionally claims a plurality of inspection means. The transport medium has a plurality of cavities arranged in lines. The driving means rotationally drives the transport medium. The supply means separates and supplies a plurality of randomly introduced electronic parts one by one. The delivery means feeds the electronic parts into the lines of cavities. The removal means removes or discharges the electronic parts from the cavities.

In claim 20, the inspection means each simultaneously inspect the electronic parts held in one of the lines of cavities.

Through the structure of the claimed invention having a supply means for separating and supplying a plurality of randomly introduced electronic parts one by one, as claimed in claims 1, 19 and 20, the claimed invention provides an electronic part transport device in which it is only necessary for a delivery means to simply insert the electronic parts into the cavities since the electronic parts are separated one by one before being introduced into the cavities of the transport medium. Therefore, delivery errors are prevented and the receiving section does not occupy a large space so that a work area of small size can be provided for the transport medium. The prior art does not show, teach or suggest the invention as claimed in claims 1, 19 and 20.

Claims 1, 5, 6, 10-11 and 15-20 were rejected under 35 U.S.C. 102(b) as being anticipated by *Garcia et al* (U.S. Patent No. 5,842,579).

Applicant respectfully traverses the Examiner's rejection of the claims under 35 U.S.C. §102(b). The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, applicant respectfully requests the Examiner withdraws the rejection to the claims and allows the claims to issue.

Garcia et al appears to disclose electronic component handlers that receive electrical circuit components, for example ceramic capacitors, present them to an electronic tester for testing, and subsequently sort the components according to test results. (col. 1, lines 5-9) The handler is a significant advance over the prior art. It eliminates manual

seating of components for test purposes and manual sorting afterwards. It handles a greater quantity of components per unit time than prior art handlers. It takes a randomly oriented heap of components and properly orients them, presents them to a tester in multiples, and provides a means for sorting the tested parts individually into any of a plurality of receiving bins, i.e. sorting bins. (col. 1, lines 13-21) Referring to FIGS. 1-6 and 15, generally designated 2 is illustrated to have a supporting structure 4 having planar surface 6 inclined at preferably 60°. Extending through a hole defined by the inclined surface, is a turntable 7, also inclined at preferably 60°, for rotating a disk-like test plate 8. The test plate is in the form of a flat ring and defines a plurality of rows 5 of open component seats 10. (col. 3, lines 41-48) Referring again to FIGS. 5, 6, 8 and 16, beneath the component seat rings is a stationary "vacuum" plate 9 which supports the seated components. (col. 4, lines 1-3) Referring again to FIGS. 1, 3, 4 and 15, the test plate 8 partially rests upon the turntable 7 and is properly located thereon by a plurality of locator pins 15 that mate with locator holes 17 defined near the inner rim of the test plate. As illustrated the test plate is rotated clockwise around a turntable hub 18. As the test plate turns, the component seats pass beneath a loading area generally designated 19, a contactor assembly 20, and an ejection manifold 22. (col. 5, lines 30-37) Referring to FIGS. 3 and 7-9, to allow the test plate to be rotated at an optimum angular speed but yet ensure that each seated component gets thoroughly tested, the contactor assembly includes multiple spaced contactor modules 24, preferably five, each of which has an upperside contact 25 in line with each ring of component seats. (col. 5, lines 42-47) Referring to

FIGS. 1, 3, 10, 10a and 14, the components 12 are distributed into the test plate seats in the loading area 19 which lies beneath a stationary, arcuate loading frame 104. The loading frame has a containment wall 106 and a plurality of seating fences, illustrated as four walls, 108a-108d, matching in number the four component seat rings. (col. 8, lines 46-52) At the nine o'clock end of the loading frame, the gaps between the fences, 110a-110d, are open to serve as mouths for insertion of components in the gaps. In operation, components to be tested are poured into the gaps in generally equal proportions, and as the components fall downward they are distributed and tumble along the seating fences by gravity. Distribution can be further assisted by use of an air knife 112 having a plurality of forced air nozzles, one directed into each gap between the fences. As illustrated, the test plate turns in the clockwise direction and due to gravity each unseated component continuously tumbles in the opposite direction, along a seating fence, over empty seats passing through an arc of the ring's rotation path until it is eventually seated. (col. 8, lines 62 through col. 9, line 8, emphasis added) Referring to FIGS. 1, 13 and 14, the components to be tested are poured into the gaps, 110a-110d, between the seating fences by an open top funnel 114 having a mouth 116 the width of which matches the gaps between the fences. As will be explained below, the funnel can be selectively positioned squarely over each of the four gaps so as to pour components primarily into the selected gap. (col. 9, lines 10-16 emphasis added)

Thus, *Garcia et al* merely discloses that components to be tested are poured into the gaps (column 8, lines 62-66, column 9, lines 10-16). Thus, nothing in *Garcia et al* shows,

teaches or suggests a supply means for separating and supplying a plurality of randomly introduced electronic parts one by one as claimed in claims 1, 19 and 20. Rather, *Garcia et al* clearly teaches away from the claimed invention and pours the components into each of the gaps.

Since nothing in *Garcia et al* shows, teaches or suggests supplying and separating a plurality of electronic parts one by one as claimed in claims 1, 19 and 20, it is respectfully requested that the Examiner withdraws the rejection to claims 1, 19 and 20 under 35 U.S.C. §102(b).

Claims 5, 6, 10-11 and 15-18 depend from claim 1 and recite additional features. It is respectfully submitted that claims 5, 6, 10-11 and 15-18 would not have been anticipated by *Garcia et al* within the meaning of 35 U.S.C. §102(b) at least for the reasons as set forth above. Therefore, it is respectfully requested that the Examiner withdraws the rejection to claims 5-6, 10-11 and 15-18 under 35 U.S.C. §102(b).

Since objected to claims 3, 8 and 13 depend from allowable claims, it is respectfully requested that the Examiner withdraws the objection thereto.

Since withdrawn claims 2, 4, 7, 9, 12 and 14 depend from allowable claims, it is respectfully requested that these claims are also in condition for allowance.

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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